**Size:** 48,753 acres

Mission: Produce, load, and store ammunition
HRS Score: 42.24; placed on NPL in June 1986

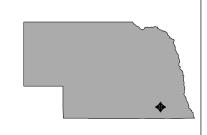
IAG Status: IAG under negotiation

**Contaminants:** Explosive compounds, UXO, VOCs, PAHs, and heavy metals

Media Affected: Groundwater and soil

Funding to Date: \$57.0 million

Estimated Cost to Completion (Completion Year): \$161.4 million (FY2031)
Final Remedy In Place or Response Complete Date for All Sites: FY2005



## Hastings, Nebraska

## **Restoration Background**

Operations at the Blaine Naval Ammunition Depot (NAD) subsite contributed to groundwater and soil contamination at the Hastings Groundwater Contamination Site. The U.S. Army Corps of Engineers (USACE) designated five operable units (OUs) at the site: three OUs for the 2,900-acre Hastings East Industrial Park (HEIP) area (OU4, soil; OU8, vadose zone; and OU14, groundwater); one OU for the former Naval Yard Dump, the Explosives Disposal Area, and the Bomb and Mine Complex Production Facility (OU16); and one OU for a 44,500-acre area whose contamination status is unknown (OU15).

Soil sampling, installation of monitoring wells, and geophysical surveys were conducted for the Remedial Investigation (RI) of the HEIP area. EPA signed a Record of Decision (ROD) to remove surface soil. In FY95, EPA signed an amendment to the ROD for removal of soil from the HEIP area.

RI, Feasibility Study (FS), and Remedial Design (RD) activities were conducted for two OUs. A Time-Critical Removal Action was conducted in an area where an air-sparging pilot study was conducted, to remove utility accesses and piping that had been identified as a source of groundwater contamination. Engineering Evaluations and Cost Analyses (EEs/CAs) were performed to assess alternatives for environmental restoration in several areas. USACE also completed a preliminary environmental study for the remaining 44,500 acres at the former depot.

In FY96, the RD for Soil Vapor Extraction (SVE) and remediation of surface soil at the HEIP area was completed. Phase II of the RD for SVE began at three source areas in OU8. USACE completed the air-sparging pilot study as part of the RI/FS for OU14 and began the Time-Critical Removal Action for the air-sparging facility. A

comprehensive RI began for 44,500 acres at the former depot. A Time-Critical Removal Action for subsurface soil and drums was conducted at the Naval Yard Dump. In addition, a Remedial Action (RA) for surface soil at the HEIP area and a Removal Action at the HEIP area were initiated.

In FY97, a sitewide groundwater Baseline Risk Assessment began. USACE used shallow and deep soil gas sampling and testing and fielded indefinite-delivery contracts to expedite contracting of the cleanup.

The property's 20-member Restoration Advisory Board (RAB) participated in a site tour and risk assessment training.

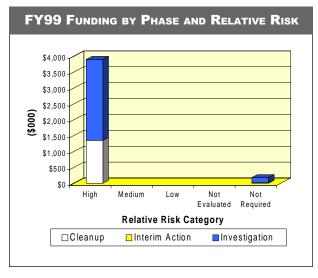
## **FY98 Restoration Progress**

The OU4 RA was completed in June. EPA completed an RA report on the OU4 soil repository, and operations and maintenance for the repository began. A Total Environmental Restoration Contract (TERC) was awarded. Activities contracted for, and now in progress, under this vehicle include groundwater Ecological Risk Assessments (ERAs), a Removal Action for the explosives disposal area, and design and construction of SVE systems, as well as preparation of numerous NAD-wide plans. Two innovative technologies, in situ bioremediation and in-well stripping, were pilot tested. The OU8 Phase I systems produced significant reductions in contamination. In coordination with USACE, Huntsville, a contract for the ordnance and explosives (OE) EE/CA was awarded, and work is now in progress.

The property's RAB members participated in groundwater hydrogeologic training. The Army signed a Federal Facility Agreement and final approval awaits conclusion of a 30-day public comment period.

## Plan of Action

- Conduct Technical Assistance for Public Participation training for RAB in November 1998
- Complete OE EE/CA in FY99
- Complete technical memo to address carcinogenic polyaromatic hydrocarbons (cPAH) in FY99
- · Continue annual groundwater monitoring program in FY99
- Complete OU14 groundwater ERA in FY99
- Design and construct OU8 Phase II SVE systems in FY99
- · Complete OU14 groundwater model in FY99
- Finalize site-wide plans in FY99
- Submit OU15 ERA in FY99
- Conduct field sampling for OU15 and OU16 EE/CA in FY99



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